

Work Order ID 121918

Friday, July 04, 2014 12:44:27 PM

121918

Page 1

Item ID: 601.3083 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Adhesive Rubber Seal
Start Date: 7/7/2014 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 7/7/2014 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: CL Date: 14/07/04 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.3700	n/c								

110

0.00

110

Purchasing

Memo

0.00

Purchasing

Issue P/O: 24886
Possible supplier: McMaster Carr
Supplier P#: 86715K27
Material release note is required.

CL 14/07/04 8

120

Receive & Inspect for Damage & Mat'l Certs

0.00

120

Packaging

Memo

0.00

Packaging

P14/7/8 (8)

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

SHP
4/7/98

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 121918

Friday, July 04, 2014 12:44:27 PM

121918

Page 2

Item ID: 601.3083

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Adhesive Rubber Seal

Start Date: 7/7/2014

Start Qty: 8.00

8

Cust Item ID:

Required Date: 7/7/2014

Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

DAS

140

Receive & Inspect for Damage & Mat'l Certs

0.00

140

Packaging

Memo

ST

0.00

8X

14-7-9

28
9-89

Packaging

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

MLJ 1407-09

Quality Control

MLJ 1407 09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

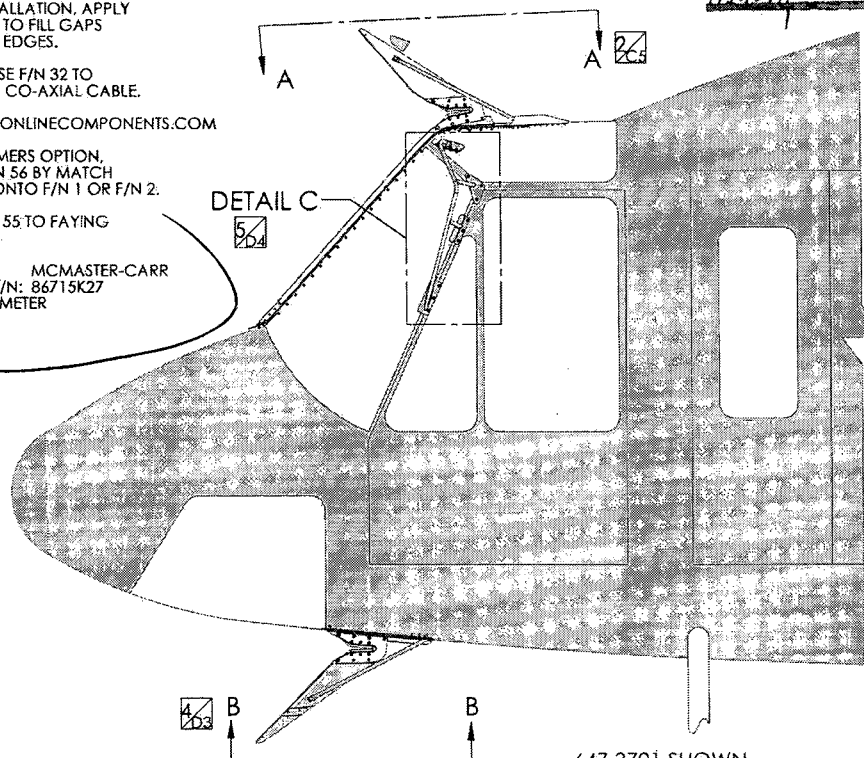
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY





Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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6 VENDOR: MCMMASTER-CARR
VENDOR P/N: 86715K27
60A DUROMETER

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: PRI		N/C
N/C	INITIAL RELEASE	09-20-09	P. BSAV



647,3701 SHOWN

	REF	REF	REF	REF	56	647.5701	GPS MOUNT KIT		
	A/R	A/R	A/R	A/R	55	601.2045	RIV	LOCITE 598	
	A/R	A/R	A/R	A/R	54	601.1012	SEALANT	RR-1425 CLASS B	
	1	1	1	1	53	601.3083	ADHESIVE RUBBER SEAL	MIL-R-3065	
	4	4	4	4	52	601.2957	NUTPLATE	MS21047-13	
	4	4	4	4	51	600.0795	NUTPLATE	MS21047-3	
	6	6	6	6	50	601.3066	NUTPLATE	MS21047-08	
	6	6	6	6	49	601.3065	NUTPLATE	MS21047-06	
	18	18	18	18	48	601.2973	LOCKNUT	MS21047-05	
	79	79	79	79	47	601.2943	LOCKNUT	MS21042-3	
	4	4	4	4	46	601.2364	CHERRY RIVET	CR3213-4-8	
	28	28	42	42	45	601.1183	CHERRY RIVET	CR3213-4-5	
	16	16	19	19	44	601.1915	CHERRY RIVET	CR3215-4-4	
	24	24	32	32	43	601.0790	CHERRY RIVET	CF3215-4-3	
	31	31	13	13	42	601.1039	CHERRY RIVET	CR3213-4-2	
	3704	3703	3702	3701	FIND	PART #	DESCRIPTION	MATL	SPEC.

						16	16	16	16	41	601.2207	NUTPLATE RIVET	COR26-455-303
						12	12	12	12	40	601.2491	NUTPLATE RIVET	CCR26455-3-04
						7	7	4	4	39	601.1066	CHERRY RIVET	CR3212-4-4
						17	17	17	17	38	601.1065	CHERRY RIVET	CR3212-4-3
						5	5	6	6	37	601.1604	CHERRY RIVET	CR3212-2-2
						6	6	6	6	36	601.3082	CHERRY RIVET	CR3212-4-1
						2	2	2	2	35	601.1874	BOLT	AN3C-10A
						8	8	8	8	34	601.2826	BOLT	AN3-11A
						3	3	3	3	33	601.2823	BOLT	AN3-8A
						1	1	1	1	32	601.3073	CONNECTOR	082-4440
						8	8	8	8	31	601.2419	SCREW	MS24694C53
						1	1	1	1	30	601.3070	SCREW	MS24694-349
						2	2	2	2	29	601.2893	SCREW	MS27039-CB11
						14	14	14	14	28	601.3069	SCREW	MS27039-1-09
						16	16	16	16	27	601.2263	SCREW	MS27039-0808
						42	42	42	42	26	601.1365	SCREW	MS27039-1-10
						12	12	12	12	25	601.2198	SCREW	MS27039-1-07
						157	157	157	157	24	601.1607	WASHER	NAS1149F033ZF
						34	34	34	34	23	601.2764	WASHER	NAS1149FNE32P
						1	1	1	1	22	647.4313	RH UPPER STRUT	
						1	1	1	1	21	647.4312	LH UPPER STRUT	
						1	1	1	1	20	647.4310	LH LOWER STRUT	
						1	1	1	1	19	647.4311	RH LOWER STRUT	
						1	1	1	1	18	647.4212	PLATE	
						1	1	1	1	17	647.4211	BRACKET RH	
						1	1	1	1	16	647.4210	BRACKET LH	
						1	1	1	1	15	647.4116	SHIM	
						2	2	2	2	14	647.4115	SHIM	
						2	2	2	2	13	647.4114	SHIM	
						1	1	1	1	12	647.4113	CLIP	
						1	1	1	1	11	647.4112	CLIP	
						1	1	1	1	10	647.4111	DOUBLER	
						1	1	1	1	9	647.4110	DOUBLER	
						1	1	1	1	8	647.4011	WIPER DEFLECTOR LH	
						1	1	1	1	7	647.4010	WIPER DEFLECTOR RH	
						1	1	1	1	6	647.3915	DEFLECTOR	
						1	1	1	1	5	647.4410	RAIL	
						1	1	1	1	4	647.3804	LOWER CUTTER ASSY HIGH	
						1	1	1	1	3	647.3803	LOWER CUTTER ASSY LOW	
						1	1	1	1	2	647.3802	212 UPPER CUTTER ASSY	
						1	1	1	1	1	647.3801	412 UPPER CUTTER ASSY	
						X	X	X	X		647.3704	204, 205, 212 CABLE CUTTERS KIT HIGH	
						X	X	X	X		647.3703	204, 205, 212 CABLE CUTTERS KIT LOW	
						X	X	X	X		647.3702	412 CABLE CUTTERS KIT HIGH	
						X	X	X	X		647.3701	412 CABLE CUTTERS KIT LOW	

NEXT ASSY (S)

ORIGINAL DATE	
IMO-DA-YR	09-29-09
DRAWN BY	CH
J. JACKSON	E
DRAWING APPROVAL	
P. BRAYO	
09-29-09	
CONTRACT NO.	

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

412 CABLE CUTTERS KIT

SIZE B	CAGE CODE 07M26	QWS. NO. 647.3700	REV. N/C
SCALE NONE		SHEET 1 OF 5	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO24886**

Purchase Order Date 7/4/2014

PO Print Date 7/7/2014

Page Number 1 of 3

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	86715K27 AS PER DWG 601.3083 B121918	Adhesive Rubber Seal 60A durometer	7/8/2014 Yes 7/8/2014		8.00 Each	\$16.73	\$133.84
Line Total:							\$133.84
2	59915K274 AS PER DWG D4777 REV. A B121800	Rod End Bearing	7/8/2014 Yes 7/8/2014		16.00 Each	\$17.14	\$274.24
Line Total:							\$274.24

Note:

7/7/2014



Purchase Order
PO24886

Page 1 of 1

200 Aurora Industrial Pkwy.
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Order Placed By
Chantal Lavoie

07/07/2014

McMaster-Carr Number
5978335-01

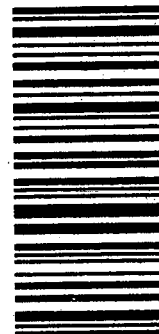
Line	Description	Ordered	Shipped	LNS	A3
1	86715K27 High-Strength Oil-Resistant Buna-N Rubber, Adhesive Back, 1/16" Thick, 12" X12", 60A Durometer Your Part Number: B121918	8 Each	1	1 - 451 - 08 24 - 04 K272	1 EA
4	26885A65 Cobalt Steel Letter Size Chucking Reamer, Size W, 1-3/4" Flute Length, .3105" Shank Diameter Your Part Number: 71500-11	4 Each	1	1 - 291	4

Shipped separately from our Cleveland warehouse on 07/07

1	86715K27 High-Strength Oil-Resistant Buna-N Rubber, Adhesive Back, 1/16" Thick, 12" X12", 60A Durometer	8 Each	7
2	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End, 3/8"-24 Right-Hand Male Shank, 3/8" Ball ID, 1-1/4" L Thread	16 Each	16
3	92311A599 18-8 Stainless Steel Cup Point Set Screw, 5/16"-24 Thread, 5/8" Long	5 Packs	5
4	26885A65 Cobalt Steel Letter Size Chucking Reamer, Size W, 1-3/4" Flute Length, .3105" Shank Diameter	4 Each	3

Dart Aerospace Ltd

EXP
INV



1 lb
2 lines

3
Light
Assembly
318

EW1BSPAJ
07/07/2014
12:12/12:22
071
Cycle 32

1141179193719





McMASTER-CARR

Purchase Order
PO24886

Page 1 of 1

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Order Placed By
Chantal Lavoie

07/07/2014

McMaster-Carr Number
5978335-02

Line	Description	Ordered	Shipped		LNS	A81
1	86715K27 High-Strength Oil-Resistant Buna-N Rubber, Adhesive Back, 1/16" Thick, 12" X12", 60A Durometer Your Part Number: B121918	8 Each	7	1 - 265 - 09 41 - 92 K272	7 EA	1
2	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End, 3/8"-24 Right-Hand Male Shank, 3/8" Ball ID, 1-1/4" L Thread Your Part Number: B121800	16 Each	16	3 - 481		2
3	92311A599 18-8 Stainless Steel Cup Point Set Screw, 5/16"-24 Thread, 5/8" Long, Packs of 50 Your Part Number: B121858	5 Packs	5	2 - 696		3
4	26885A65 Cobalt Steel Letter Size Chucking Reamer, Size W, 1-3/4" Flute Length, .3105" Shank Diameter Your Part Number: 71500-11	4 Each	3	2 - 501		4

Shipped separately from our Chicago warehouse on 07/07

1	86715K27 High-Strength Oil-Resistant Buna-N Rubber, Adhesive Back, 1/16" Thick, 12" X12", 60A Durometer	8 Each	1
4	26885A65 Cobalt Steel Letter Size Chucking Reamer, Size W, 1-3/4" Flute Length, .3105" Shank Diameter	4 Each	1

Dart Aerospace Ltd

EXP
INV



8 lbs
4 lines

Me

12x12x12

FW1BSP21
07/07/2014
12:12/13:17
827
Cycle 45

1141179193723

